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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,218	07/30/2001	Edward R. diGirolamo	P4782-014	2150

24112 7590 07/31/2003

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EXAMINER

WUJCIAK, ALFRED J

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,218

Applicant(s)

DIGIROLAMO ET AL.

Examiner

Alfred J Wujciak III

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-43 and 61-65 is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-22, 44-50 and 56-60 is/are rejected.
- 7) ☒ Claim(s) 10, 12, 23 and 51-55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

This is the third Office Action for the serial number 09/918,218, MODULAR I-BEAM, filed on 7/30/01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,394,906 to Farley and in view of US Patent 518,645 to Emery.

In regards to claim 1, Farley teaches a modular I-beam (figure 2) comprising a first set of elongated nested channels (101) and a second set of elongated nested channels (101) disposed in back-to-back relation with the first set of nested channel. In regards to claim 2, the first and second sets of nested channels comprise at least one channel pair. In regards to claim 3, each channel pair comprises an outer channel (located in between two channels) and inner channel (located in an opening channel). The outer and inner channels comprise a top flange, a bottom flange and a central web connecting the top and bottom flanges. In regards to claim 9, the top and bottom flanges of the inner channels angle outwardly from a midline of the channel to engage the top and bottom flanges respectively of the outer channel (figure 2).

Farley teaches that the first set of elongated nested channels and second elongated nested channels but fails to teach fasteners for securing the first and second sets of nested channels

Art Unit: 3632

together. Emery teaches the first and second elongated nested channel being secured by fasteners (4). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added fasteners to Farley as taught by Emery to provide a stable connection between the two elongated nested channels to prevent them from falling apart.

Claims 4-8 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Emery and in further view of US Patent # 5,553,437 to Navon.

Farley teaches the top flange and bottom flange of outer and inner channels but fails to teach the outer and inner channels include an outer end portion that angles inwardly towards a midline of the channel. Navon teaches the channel (122) having top and bottom flanges (155) including an outer end portion that angle inwardly towards a midline of the channel.

Furthermore, Navon teaches variety of the angle of inclination for the outer end of channel (figures 12c and 12d). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Farley's top and bottom flanges of outer and inner channels with an outer end portion that angle inwardly towards a midline of the channel as taught by Navon to provide a hanger support for suspending an object adjacent to the beam and to provide a security for the outer channel to remain within the inner channel.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Emery and in further view of Navon.

Farley teaches the first and second set of channels but fails to teach the first and second set of channels include one or more aligned openings to receive the fasteners. Navon teaches the

Art Unit: 3632

channel having one or more aligned openings to receive the fasteners (18). The fasteners comprise threaded fasteners (col.3, line 10). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the openings in Farley's channel as taught by Navon to provide alternative method for attaching the first and second set channels together.

Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Emery and in further view of Navon.

Farley teaches the modular I-beam but fails to teach the modular I-beam includes at least one plate/closure channel extending at least partially around one of the first and second set of nested channels, having an outer face plate. Navon teaches the modular I-beam (figure 14b) having at least one plate/closure channel (234). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added plate to Farley's modular I-beam as taught by Navon to provide a closure for the I-beam.

Claims 44-50 and 56-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Emery and in further view of Navon.

Farley in view of Navon teaches the elements above but fails to teach the use of elements as a method. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the elements as a method to provide a convenience for connecting the first and second sets of nested channels together.

Art Unit: 3632

Allowable Subject Matter

Claims 10-12, 23, and 51-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-43 and 61-65 are allowed.

In regard to claim 10 and 61-63, the prior art fails to teach the first and second sets of channels each comprise at least two pairs of channels. In regard to claims 11-12, 51-55 and 64-65, the prior art fails to teach a central beam disposed between the first and second set of channels. In regards to claim 23, the prior art fails to teach the modular I-beam comprising a central beam disposed between the first and second sets of channels and wherein the upper and lower plates of the closure channel are secured to the central beam. In regard to claim 24-43, the prior art fails to teach the modular I-beam comprising a central beam and a second set of elongated nested channel disposed on a second side of the central beam and oriented in a direction opposite the first set of elongated nested channels.

Response to Arguments

Applicant's arguments with respect to claims 1-23 and 44-60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Art Unit: 3632

US Patent # 6,561,736 to Doleshal

US Patent # 5,287,675 to McGee

US Patent # 6,360,510 to Woodrum et al.

US Patent # 3,483,665 to Miller

US Patent # 542,283 to Rousseau

US Patent # 3,328,931 to Smith

US Patent # 1,900,541 to Buelow et al.

US Patent # 991,603 to Brooks

US Patent # 1,344,229 to Hutchinson

Doleshal, McGee, Woodrum et al., Miller, Rousseau, Smith, Buelow et al., Brooks and Hutchinson teach the first and second elongated nested channels.

Art Unit: 3632


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred J Wujciak III whose telephone number is 703 306 5994.

The examiner can normally be reached on 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Les Braun can be reached on 703 308 2156. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 3519 for regular communications and 703 308 3519 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 1113.

Joey Wujciak
July 25, 2003



LESLIE A. BRAUN
SUPERVISORY PATENT EXAMINER